MATH III REVIEW

1. If the dimensions of a rectangle are represented by (3x - 2) and (x + 5), which expression represents the perimeter of the rectangle?

a. 4x + 3 b. 2x + 10

c. 6x – 4 d. 8x + 6

1. Simplify: 

a. 0 b. 

c.  d. 

1. Simplify (x²- 7x + 6)(x – 3)

a. x³- 4x²- 15x + 18 b. x² - 6x – 3

c. x³- 3x² + 14x – 12 d. x³ - 10x² + 27x – 18

1. What is the slope and y-intercept of the line whose equation is 3x + 4y = 12?

a. m =  , b = 3 b. m= , b = 3

c. m= , b = 4 d. m=  , b =12

1. At the end of March, Boston had won 17 out of 30 baseball games. By the end of May, Boston had won 55 out of 80 games. If those results represent a linear trend, estimate how many games Boston will win by the end of the season after 162 games are played.

a. 92 b. 111

c. 117 d. 221

1. During the month of July a house used 2257 kilowatt-hours (kWh) of electricity. The owner was charged $7.87 plus $0.0769 per kWh. In January, the owner was charged $7.87 plus $0.0763 per kWh for electricity. What was the difference between July and January charges for 2257 kWh of electricity?

a.$1.35 b.$361.51

c.$6.00 d.$1.00

1. A tennis instructor charges $40 for each one-hour lesson and $25 for each half-hour lesson. If the instructor’s income from 35 lessons was $1,115, how many one-hour lessons did she give?

a. 22 b. 19

c.16 d. 15

1. An inkjet printer costs $125 and 6 cents per page to operate. A laser jet printer costs $250 and 2 cents per page to operate. At how many pages will the cost of the two printers be the same?

a. 9,375 pages b. 3,125 pages

c. 1,875 pages d. 1,563 pages

1. If R =  and V = , which is equivalent to 2V – R?

a.  b. 

c.  d. 

1. If C =  and D = , which is true?

a. C + D =  b. C + D = 

c. C + D =  d. C + D does not exist.